

## Freeform Search

<b>Database:</b>	<div style="border: 1px solid black; padding: 2px;">         US Pre-Grant Publication Full-Text Database          US Patents Full-Text Database          US OCR Full-Text Database          EPO Abstracts Database          JPO Abstracts Database          Derwent World Patents Index          IBM Technical Disclosure Bulletins       </div>
<b>Term:</b>	<div style="border: 1px solid black; padding: 2px;">         L6 and ((ribose or ribonucleotide\$1) near5          (termin\$2 or end\$1))       </div>
<b>Display:</b>	<input type="text" value="10"/> Documents in <b>Display Format:</b> <input type="text" value="-"/> Starting with Number <input type="text" value="1"/>
<b>Generate:</b> <input type="radio"/> Hit List <input checked="" type="radio"/> Hit Count <input type="radio"/> Side by Side <input type="radio"/> Image	

Search

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### Search History

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DATE: Thursday, October 26, 2006    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<u>L7</u>	L6 and ((ribose or ribonucleotide\$1) near5 (termin\$2 or end\$1))	18	<u>L7</u>
<u>L6</u>	l2 and (primer\$1 near5 modif\$7)	26	<u>L6</u>
<u>L5</u>	l2 and (primer\$1 neaer5 modif\$7)	0	<u>L5</u>
<u>L4</u>	L3 and (ribose or ribonucleotide\$1)	1	<u>L4</u>
<u>L3</u>	L2 and (primer\$1 near5 (termin\$2 or end\$1) near5 modif\$7)	2	<u>L3</u>
<u>L2</u>	L1 and (primer\$1 near5 homopolym\$4)	91	<u>L2</u>
<u>L1</u>	librar\$3 near5 (target\$1 or nucleic acid or polynucleotide\$1 or oligonucleotide\$1)	29096	<u>L1</u>

END OF SEARCH HISTORY

> s primer#(10a)(homopolym####)  
L1 438 PRIMER#(10A)(HOMOPOLYM####)

=> s l1 and (3' end# or 3' termin##)(10a)(modif#####)  
L2 0 L1 AND (3' END# OR 3' TERMIN##)(10A)(MODIF#####)

=> s l1 and ((3' end# or 3' termin##)(10a)(modif#####))  
L3 0 L1 AND ((3' END# OR 3' TERMIN##)(10A)(MODIF#####))

=> s l1 and ((end# or termin##)(10a)modif#####)  
L4 5 L1 AND ((END# OR TERMIN##)(10A) MODIF#####)

=> s l4 and librar###  
L5 0 L4 AND LIBRAR###

=> dup rem l4  
PROCESSING COMPLETED FOR L4  
L6 2 DUP REM L4 (3 DUPLICATES REMOVED)

=> d l6 1-2 bib ab kwic

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2006:234803 CAPLUS  
DN 144:306410  
TI Controlling the extendability of primers in nucleic acid amplifications  
and prevent primer extension products acting as primers  
IN Rabbani, Elazar; Stávrianopoulos, Jannis G.; Donegan, James J.; Coleman,  
Jack  
PA USA  
SO U.S. Pat. Appl. Publ., 59 pp., Cont.-in-part of U.S. Ser. No. 896,897.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 2006057583	A1	20060316	US 2003-693481	20031024
	US 2004161741	A1	20040819	US 2001-896897	20010630
	CA 2390141	AA	20021230	CA 2002-2390141	20020610
	JP 2003088390	A2	20030325	JP 2002-192771	20020701
	US 2005009077	A1	20050113	US 2004-900455	20040727
	US 2005233343	A1	20051020	US 2004-900452	20040727
	US 2006040270	A1	20060223	US 2004-900451	20040727
	US 2006099601	A1	20060511	US 2004-900453	20040727
	US 2006172310	A1	20060803	US 2004-900454	20040727
	US 2005170370	A1	20050804	US 2004-902587	20040729
	US 2005202455	A1	20050915	US 2004-902629	20040729
	US 2005202456	A1	20050915	US 2004-902640	20040729
	US 2005214784	A1	20050929	US 2004-902641	20040729
	US 2006014156	A1	20060119	US 2004-902682	20040729
	US 2006035238	A1	20060216	US 2004-902597	20040729
	US 2006040271	A1	20060223	US 2004-902567	20040729
	US 2006040272	A1	20060223	US 2004-902586	20040729
PRAI	US 2001-896897	B2	20010630		

AB Methods of controlling the behavior of nucleic acids in amplification reactions to prevent unwanted side-reactions are described. These methods can apply to DNA or RNA, and to primers, especially those containing universal detection tags (UDTs.). They prevent the primers from being amplified in the absence of the target sequence, and prevent amplification products from acting as primers themselves. This may involve modifying the 3'-end of the primer to prevent it from being used in the absence of a target, e.g. by treatment with periodate, or the use of ribose analogs. This may include the use of a terminal transferase to add blocking homopolymeric tails to target-bound primers.

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L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 1992:482919 CAPLUS

DN 117:82919

TI Inhibition of human immunodeficiency virus type 1 reverse transcriptase by 3'-blocked oligonucleotide primers

AU Austermann, Sabine; Kruhoeffer, Mogens; Grosse, Frank

CS Dep. Virol. Immunol., German Primate Cent., Goettingen, W-3400, Germany

SO Biochemical Pharmacology (1992), 43(12), 2581-9

CODEN: BCPCA6; ISSN: 0006-2952

DT Journal

LA English

AB HIV-1 reverse transcriptase (RT) (EC 2.7.7.49) with a high specific activity has been purified from the overexpressing Escherichia coli strain DH5 $\alpha$ [pJS3.7]. Steady-state kinetics of DNA synthesis catalyzed by RT were analyzed on polyriboadenylate 20-mer of (3'-5')deoxythymidylate [poly(rA).(dT)20] and polyribouridylate 20-mer of (3'-5')-deoxyadenylate [poly(rU).(dA)20] homopolymeric template-primers.  $K_m$  Values of 40 and 140 nM (3'-OH ends) and  $K_{cat}$  values of 4 and 0.14 sec<sup>-1</sup> were determined for the two different substrates. Oligonucleotide primers (dA)20 and (dT)20 were elongated in a terminal transferase-catalyzed reaction (EC 2.7.7.31) with ddATP, 3'-dATP (cordycepin), 2',3'-epoxy-ATP and arabino-ATP; and ddTTP, 3'-azido-TTP, 3'-dUTP, 3'-F-dTTP and rUTP, resp. The resulting oligonucleotides were hybridized to their complementary templates and the inhibitory potential of these compds. toward DNA synthesis started from unchanged primers was measured. Oligonucleotides with unextendable 3'-groups were shown to act as strong inhibitors of DNA synthesis catalyzed by HIV-1 RT. In particular, poly(rA).(dT)20-[ddTTP] and poly(rU).(dA)20-[3'-dAMP] were potent competitive inhibitors, displaying  $K_i$  values of about 6 and 12 nM, resp. Also 3'-azido-, and 3'-fluoro-terminated oligonucleotides showed competitive inhibition with inhibition consts. in the range of 20-35 nM. In contrast, 2',3'-epoxy-terminated (dA)21 displayed a mixed-type inhibition with a  $K_i$  value of 67 nM. Arabino-terminated (dA)21 was found to be an uncompetitive inhibitor of HIV-1 RT with an inhibition constant of 318 nM. Arabino-terminated primers did not act as strict chain terminators because they could be elongated by HIV-1 RT. This study provides information on the structure-activity relationship of modified 3'-termini of primer mols. which might be exploited as inhibitors of HIV in the future.

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